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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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| 09/061,318      | 04/16/98    | BERGMAN              | E 244/277           |

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IM22/0322

EXAMINER

STINSON, F

ART UNIT

PAPER NUMBER

1746

DATE MAILED: 03/22/01

*22*

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/061,318

Applicant(s)

BERGMAN ET AL.

Examiner

FRANKIE L. STINSON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 87-102 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 87-102 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13,14,18.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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1. Applicant's election without traverse of the species of fig. 1, claims 87-102, in Paper No. 19 is acknowledged.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 87 and 89-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dobson in view of either EPO'506 or Sumnitsch.

Re claims 87, 96 and 102, the patent to Dobson is cited disclosing an apparatus for processing a workpiece comprising a liquid reservoir, a dispersion unit, a liquid path extending between the reservoir and the process unit, an ozone gas supply/generator, connected to the dispersion unit and one or more supplying lines extending from the ozone generator to the fluid path for injecting ozone into the fluid path (see fig. 11 B) that differs from the claims only in the recitation of the nozzles disposed for spraying liquid onto the surface of a workpiece, the pump connected to the reservoir and the fluid path and a rotor. The EPO'596 (fig. 3) and Sumnitsch patents are each cited disclosing a device to process a workpiece comprising spray means for spraying the surface of the workpiece with liquid and a rotor for spinning the workpiece. It therefore would have been obvious to one having ordinary skill in the art to modify the device of Dobson, to have the liquid path extending between the liquid reservoir and spray nozzles; and a rotor for spinning the workpiece as taught by either EPO'596 or Sumnitsch, for the purpose of enhancing the cleaning process. As for the pump, Dobson discloses a pump

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in col. 12, line for supplying the reservoir with liquid. To extend this teaching from the reservoir to the fluid path would have been obvious as an extension of the teachings of Dobson and as in commonly done in the art. Re claim 89, 91, and 97, EPO'596 discloses the mixer. To have the mixer specifically as claimed is deemed to be an obvious matter of design. Known equivalents are expected to achieve the desired results. This is also applicable to the subject matter of claims 92-94, namely the liquids. Re claim 95, although not explicitly disclosed by Dobson, it would have been obvious to one having ordinary skill in the art to modify the device to Dobson, to include a pump connected to the reservoir and fluid path since this would only be an obvious extension of the teachings of the pump as described in col. 12, line 29. Re claim 98 and 101, EP'596 and Sumnitsch both disclose the rotor. Re claims 99 and 100, Dobson discloses the process chamber and recirculation/filter system.

4. Claim 88 rejected under 35 U.S.C. 103(a) as being unpatentable over Dobson in view of either EPO'596 or Sumnitsch as applied to claim 87 above, and further in view of either Tuunanen et al. or Caimi et al'842.

Claim 88 defines over the applied prior art only in the recitation the gas supply system also being connected into liquid path. The patents to Caimi and Tuunanen are cited disclosing the concept of a gas supply system also being connected to the liquid path for injecting gas into the liquid flowing through the liquid path. It therefore would have been obvious to one having ordinary skill in the art to modify the gas supply system of Dobson, to include a connection to the liquid path for injection therein, as taught by

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either Caimi or Tuunanen, for the purpose of driving the fluid to the process chamber and for ensuring that the gas and liquid are thoroughly mixed.


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Omi et al., Swamoto, Caimi et al.'806, Ueyama et al., Leon et al., note the cleaning means.

6. Applicant's arguments with respect to claims 87-102 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (703) 308-0661. The examiner can normally be reached during the first week of the pay-period M-F from 5:30 a.m. to 3:00 p.m. and during the second week of the pay-period from Tu-Th second from 5:30 a.m. to 3:00 p.m. and on Fri. from 5:30 a.m. to 2:00 p.m. Alternating Mondays off.

The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7719.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
FRANKIE L. STINSON  
Primary Examiner  
Art Unit 1746

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